



PROGRESS REPORT NO. 174

TO: Robert Tan, U.S. Environmental Protection Agency (EPA) – via Electronic mail
Kathryn Cerise, EPA – via Electronic mail

FROM: Denise Mills, Teck American Incorporated (TAI)

Cc: Kris McCaig, TAI – via Electronic mail
Rob Orr, TAI – via Electronic mail

DATE: January 11, 2021

FILE NO: 01-773180-000

RE: Upper Columbia River (UCR) Remedial Investigation/Feasibility Study
(RI/FS) – Progress Report No. 174 Month Ending December 2020

Pursuant to Paragraph 39 of the June 2, 2006 Settlement Agreement (Agreement), the following is intended to provide a summary of activities completed during the past month in compliance with the Agreement. It is also intended to provide a brief summary of pending and on-going activities.

Soil Amendment Technology Evaluation Study (SATES):

The third-party data validator completed validation of the analytical results for the Phase II bench-scale testing time point 3 (t3) soil samples, which were collected at the end of the bench testing on March 11, 2020. As of this writing, TAI is preparing the validated Phase II dataset for transmittal to EPA in early 2021. All of the bench test results will be incorporated into the draft Phase II Data Summary Report (DSR) currently being prepared for the study, and evaluated in a statistical analysis report that will discuss results of the bench-scale testing and effects of the soil treatments tested in the lab. Amendment application for the field-scale testing program (Phase III) was completed at only test plot 258-3 in November 2020. Amendment application to the other three test plots and the initial Phase IV soil sampling event will be completed in Spring 2021, as documented in the EPA-approved Work Plan Change Request No. 2.

Baseline Ecological Risk Assessment (BERA):

Soil Toxicity Reference Values (TRVs) – TAI provided a draft technical memorandum to EPA on September 18, 2020, which summarized the results of implementation of the soil TRV development approach Steps 1 through 6, as described in the “Final Approach for Evaluating the Potential for Metals Toxicity to Plants and Invertebrates in the Baseline Ecological Risk Assessment (May 2019).” EPA provided comments on the draft technical memorandum in a letter delivered to TAI via electronic mail on November 9, 2020. TAI provided a letter to EPA, dated December 18, 2020, that confirmed the Upland Baseline Ecological Risk Assessment will address input received from EPA and provided additional clarification.

2019 Phase 3 Sediment Study:

2019 Phase 3 Sediment Study DSR – TAI submitted the draft DSR to EPA for review and comment on December 23, 2020.

Toxicity Identification Evaluation (TIE) Pilot Study – TAI submitted the addendum to the Draft TIE Pilot Study report to EPA electronically on November 23, 2020, along with the draft pilot study report that was originally submitted to EPA on September 19, 2019. The report addendum focuses on the additional TIE experiments performed since March 2020. TAI received a letter from EPA on December 21, 2020 providing comments the draft pilot study report and report addendum, and a recommendation to discontinue the TIE study program and to drop any plans for using TIEs in the RI/FS process. TAI responded with letter on December 23, 2020, acknowledging that while EPA is not requiring TAI to finalize either the Draft TIE Pilot Study report or the report addendum, TAI reserves the right to revisit the potential to run a TIE study in later phases of the UCR RI/FS for the reasons explained in that letter.

Bioassay Testing – TAI submitted the bioassay biological endpoint and bioassay porewater and sediment analytical chemistry data deliverable to EPA on October 30, 2020. The bioassay biological laboratory data report is included as an appendix to the draft 2019 Phase 3 Sediment Study DSR submitted on December 23, 2020. As of this writing, EPA provided, via the U.S. Geological Survey Columbia Environmental Research Center (CERC), provisional 2019 Phase 3 Sediment Study split sample bioassay and porewater chemistry data to TAI on December 2, 2020. EPA is currently reviewing and validating these results. The acid-volatile sulfide/simultaneously extracted metals data package was provided to EPA and TAI via CERC on December 14, 2020. TAI understands that CERC will provide the remaining split sample bioassay data (total recoverable metals and organic carbon) in early 2021. EPA and TAI held a call on December 17, 2020 to discuss the quartz sand bioassay auxiliary control sample results from Pacific EcoRisk. The call focused on potential causes for the poor results and potential path forward.

Human Health Risk Assessment – TAI initiated review and compilation of additional documentation on the operation, maintenance, and performance of the Columbia Gardens air quality monitoring station provided by Teck Metals Ltd., in response to EPA's November 9, 2020 request for the additional information. As of this writing, TAI is on track to deliver this information to EPA in January 2021.

Should you have any questions or require any additional information, please do not hesitate to contact me at 509-623-4515.